APPLICANT(S):   SMOLYAR, Lev et al.
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AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application the claims indicated as cancelled:

1. (Previously Presented) A method comprising:

calculating a plurality of format metric values based on a coding rate for a plurality of calculated Viterbi metric values;

comparing the calculated format metrics;

based on the comparison, determining a probable transmitted format for a transmitted block from the set of possible formats;

calculating a format metric for a possible bit value using a function:

$$FormatMetric = \frac{ViterbiMetric^2}{2\sigma^2 N} - N \cdot \ln(2) / CodingRate$$

wherein $ViterbiMetric^2$ is a squared Viterbi metric value for a format parameter, N is the number of assumed transmitted bits corresponding to a format, $Sigma^2$ (σ^2) represents the noise variance of the received block, and CodingRate represents the known encoding rate used for transmission for the received block; and

using a probable transmitted formula to decode the transmitted block.

2. (Original) The method of claim 1, comprising determining a plurality of possible data bit values for a transmitted data block with an unknown transmission format.

3. (Cancelled)

4. (Cancelled)

5. (Original) The method of claim 1, comprising determining the highest format metric calculated.

6. (Cancelled)

7. (Previously Presented) A method comprising:

calculating a plurality of Viterbi metric values for a plurality of possible format parameters;

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calculating a format metric for said possible format parameters, using the respective

calculated Viterbi metric values and a decision level variable;

determining a probable transmitted format for a transmitted block by comparing the

calculated format metrics for the possible format parameters;

assuming a probable transmission format based on the lowest format metric

calculated; and

using a probable transmitted formula to decode the transmitted block.

8. (Cancelled)

9. (Original) The method of claim 7, comprising basing said decision level variable on

an amplitude value.

10. (Original) The method of claim 7, comprising basing said decision level variable on a

noise standard deviation.

11. (Original) The method of claim 7, comprising basing said decision level variable on

the difference between the number of bits for various possible formats.

12. (Original) The method of claim 7, comprising calculating a format metric for a

possible bit value using a function:

$$FormatMetric = DecisionLevel * N - ViterbiMetric$$

wherein DecisionLevel is a number based on characteristics of a received packet,

N is a format parameter, and ViterbiMetric is the Viterbi metric.

13. (Previously Presented) A device comprising:

a processor to calculate a plurality of Viterbi metric values for a set of possible format

parameters for a received block, to calculate a set of format metrics for said

possible format parameters, to compare the calculated format metric values, and,

based on the comparison, to determine a probable transmitted format for a

transmitted block from the set of possible formats, wherein the processor is to

wherein the processor is to calculate a format metric for a possible format

parameter using a function:

$$FormatMetric = \frac{ViterbiMetric^2}{2\sigma^2 N} - N \cdot \ln(2) / CodingRate$$

wherein ViterbiMetric^2 is a squared Viterbi metric value for a format parameter, N is

the number of assumed transmitted bits corresponding to a format, Sigma^2 (σ^2)

represents the noise variance of the received block, and CodingRate represents

the known encoding rate used for transmission for the received block; and

a memory for storing the transmitted block.

14. (Original) The device of claim 13, wherein the processor is to determine a plurality of

possible format parameter values for said received packet.

15. (Cancelled)

16. (Original) The device of claim 13, wherein the processor is to determine the highest

format metric calculated.

17. (Cancelled)

18.   (Previously Presented) A device comprising:

a processor to calculate a plurality of Viterbi metric values for a plurality of possible